ABSTRACT

REDUCING MEMORY ACCESSES IN PROCESSING TCP/IP PACKETS

A method, computer program product and system for processing TCP/IP packets. A TCP protocol stack may store a payload of a received TCP/IP packet in a data fragment list. The TCP protocol stack may further read the header of the received packet to extract a value used to index into a table storing a list of transport control blocks (TCBs). The TCP protocol stack may further perform a lock and a read operation on the TCB indexed in the table. The TCP protocol stack may further transmit the payload to the TCP application without requiring the application to perform a lock, read, write or unlock operation on the indexed TCB since the TCP protocol stack and the TCP application are operating on the same thread. By the TCP application foregoing the lock, read, write and unlock operations on the TCB, there is a reduction in the number of memory accesses.